



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	10/044,539
Filing Date	January 11, 2002
First Named Inventor	Cech, Thomas
Art Unit	1646
Examiner Name	
Attorney Docket Number	015389-002630US

U.S. PATENT DOCUMENTS+

Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
LNL	A1	US-5,597,897	01-28-1997	Diamond	
LNL	A2	US-5,917,025	08-29-1999	Collins	
LNL	A3	US-6,166,178	12-26-2000	Cech et al.	
LNL	A4	US-6,309,867	10-30-2001	Cech et al.	
LNL	A5	US-6,337,200	01-08-2002	Morin	
LNL	A6	US-6,475,789 B1	11-05-2002	Cech et al.	
LNL	A7	US-6,610,839 B1	08-28-2003	Cech et al.	
LNL	A8	US-6,617,110 B1	09-09-2003	Cech et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
LNL	B1	GB	2 317 891	A	04-08-1998			<input type="checkbox"/>
LNL	B2	PCT	WO 93/23572	A1	11-25-1993			<input type="checkbox"/>
LNL	B3	PCT	WO 94/17210	A1	08-04-1994			<input type="checkbox"/>
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LNL	B8	PCT	WO 99/38964	A2	08-05-1999			<input type="checkbox"/>
LNL	B9	PCT	WO 00/46355	A2	08-10-2000			<input type="checkbox"/>

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Sheet 2 of 5

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
LXL	C1	ADAMSON, D. et al. "Significant Telomere Shortening in Childhood Leukemia", <i>Cancer Genet. Cytogenet.</i> , 1992; pp. 204-206, Vol. 61	<input type="checkbox"/>
LXL	C2	AUTEXIER, CHANTAL, et al., "Telomerase and cancer: revisiting the telomere hypothesis; Trends in Biochemical Sciences, 1996, pp. 387-391, Vol. 10, No. 21.	<input type="checkbox"/>
LXL	C3	AVILION, A., "Characterization and expression of human telomerase," <i>Dissertation Abstracts International</i> , 1996, pp. 5930-B, Vol. 56, No. 11	<input type="checkbox"/>
LXL	C4	BARINGA, MARCIA, "The Telomerase Picture Fills In", <i>Science</i> , April 25, 1997; pp. 528-529, Vol. 276	<input type="checkbox"/>
LXL	C5	CHIU, et al. "Replicative senescence and cell immortality: the role of telomeres and telomerase (44075)", <i>Proc. Soc. Exp. Bio. Med.</i> , 1997, pp. 99-106, Vol. 214.	<input type="checkbox"/>
LXL	C6	CHONG, L. et al. "A Human Telomeric Protein", <i>Science</i> , Dec. 1995, pp. 1663-1667, Vol. 270.	<input type="checkbox"/>
LXL	C7	COLLINS, KATHLEEN, "Structure and function of telomerase", <i>Current Opinion in Cell Biology</i> , 1996, pp. 374-380, Vol. 8	<input type="checkbox"/>
LXL	C8	COUNTER, C. et al. "Telomerase Activity in Normal Leukocytes and in Hematologic Malignancies" <i>Blood</i> ; May 1, 1995; pp. 2315-2320, Vol. 85, No. 9.	<input type="checkbox"/>
LXL	C9	COUNTER, C. et al. "Telomere shortening associated with chromosome instability is arrested in immortal cells which express telomerase activity", <i>The EMBO Journal</i> ; 1992, pp. 1921-1929, Vol. 11; No. 5, Oxford University Press.	<input type="checkbox"/>
LXL	C10	DE LANGE, T. et al. "Structure and Variability of Human Chromosome Ends"; <i>Molecular and Cellular Biology</i> ; February 1990; pp. 518-527, Vol. 10, No. 2.	<input type="checkbox"/>
LXL	C11	FLAVELL, R. & MATHIAS, R. "Prospects for transforming monocot crop plants", <i>Nature</i> , 12 Jan. 1984, pp. 108-109, Vol. 307.	<input type="checkbox"/>
LXL	C12	FRESHNEY, <i>Culture of Animal Cells, A Manual Basic Technique</i> , p. 4, Alan R. Liss, Inc. New York, 1983.	<input type="checkbox"/>
LXL	C13	Genbank Accession No. A46242; September 21, 1993	<input type="checkbox"/>
LXL	C14	Genbank Accession No. L38903; January 30, 1995	<input type="checkbox"/>
LXL	C15	Genbank Accession No. Q06163; November 01, 1995	<input type="checkbox"/>
LXL	C16	Genbank Accession No. S39696; October 07, 1994	<input type="checkbox"/>

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LAL	C17	Genbank Accession No. S53396; May 5, 1995	<input type="checkbox"/>
LAL	C18	GenBank Accession No. U95964; May 5, 1997	<input type="checkbox"/>
LAL	C19	GenBank Accession No. W70315; June 19, 1996	<input type="checkbox"/>
LAL	C20	GLASER, P. et al. "Bacillus subtilis genome project: cloning and sequencing of the 97 kb region from 325* to 333*" <i>Molecular Microbiology</i> , 1993, pp. 371-384, Vol. 10, No. 2.	<input type="checkbox"/>
LAL	C21	GOODMAN, R. et al. "Gene Transfer in Crop Improvement", <i>Science</i> , 3 April 1997, pp. 48-54, Vol. 236.	<input type="checkbox"/>
LAL	C22	GREIDER, C. "Telomeres, Telomerase and Senescence"; <i>BioEssays</i> ; 1990; pp. 363-369, Vol. 12, No. 8.	<input type="checkbox"/>
LAL	C23	HARLEY, C. "Telomere loss: Mitotic clock or genetic time bomb?" <i>Mutation Research</i> ; 1991; pp. 271-282, Vol. 256, Elsevier Science Publishers.	<input type="checkbox"/>
LAL	C24	HARLEY, C. & VILLEPONTEAU, B. "Telomeres and telomerase in aging and cancer" <i>Current Opinion in Genetics and Development</i> ; 1995, pp. 249-255, Vol. 5.	<input type="checkbox"/>
LAL	C25	HARLEY, C. et al. "Telomeres shorten during ageing of human fibroblasts", <i>Nature</i> , 31 May 1990; pp. 458-460, Vol. 345.	<input type="checkbox"/>
LAL	C26	HASTIE, N. et al. "Telomere reduction in human colorectal carcinoma and with ageing", <i>Nature</i> , 30 August 1990, pp. 866-868, Vol. 346.	<input type="checkbox"/>
LAL	C27	HEALY, K. C. "Telomere dynamics and telomerase activation in tumor progression: prospects for prognosis and therapy" <i>Oncol. Res.</i> , 1995, pp. 121-130, Vol. 7	<input type="checkbox"/>
LAL	C28	HENDERSON, C. Cancer genetics gene regulates telomerase resulting in death of cancer cells; <i>Gene Therapy Weekly</i> , 11 September 1995.	<input type="checkbox"/>
LAL	C29	HIYAMA, E. et al. "Correlating telomerase activity levels with human neuroblastoma outcomes"; <i>Nature Medicine</i> ; 3 March 1995; pp. 249-255, Vol. 1, No. 3.	<input type="checkbox"/>
LAL	C30	HOLTZMANN, K. et al. "Telomeric Associations and Loss of Telomeric DNA Repeats in Renal Tumors", <i>Genes, Chromosomes & Cancer</i> , 1993, pp. 178-181, Vol. 6.	<input type="checkbox"/>
LAL	C31	JÄHNE, A. et al. "Genetic Engineering of Cereal Crop Plants: A Review", <i>Euphytica</i> , 1995, pp. 35-44, Vol. 85, Kluwer Academic Publishers, Netherlands.	<input type="checkbox"/>
LAL	C32	JOLLIFFE, L.K. "Humanized antibodies: enhancing therapeutic utility through antibody engineering", <i>Int. Rev. Immunol.</i> , 1993, pp. 241-250, Vol. 10	<input type="checkbox"/>
LAL	C33	KIM, N. et al. "Specific Association of Human Telomerase Activity with Immortal Cells and Cancer", <i>Science</i> , 23 December 1994, pp. 2011-2014, Vol. 266.	<input type="checkbox"/>

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/044,539		
		Filing Date	January 11, 2002		
		First Named Inventor	Cech, Thomas		
		Art Unit	1646		
		Examiner Name			
Sheet	4	of	5	Attorney Docket Number	015389-002630US

NON PATENT LITERATURE DOCUMENTS			
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LDL	C34	KLINGELHUTZ, A. et al. "Restoration of Telomeres in Human Papillomavirus- Immortalized Human Anogenital Epithelial Cells"; <i>Molecular and Cellular Biology</i> , Feb. 1994, pp. 961-969, Vol. 14, No. 2.	<input type="checkbox"/>
LDL	C35	LEWIS, A. & CROWE, J.S. "Generation of humanized monoclonal antibodies by 'best fit' framework selection and recombinant polymerase chain reaction", <i>Year Immunol.</i> , 1993, pp. 110-118, Vol. 7	<input type="checkbox"/>
LDL	C36	Linking telomerase and tumors; <i>Genesis Report- Dx</i> ; 1995; Vol. 4, No. 6; Publisher Genesis Group Associates.	<input type="checkbox"/>
LDL	C37	LUNDBLAD, V. & BLACKBURN, E., Letter to the Editor entitled, "RNA-Dependent Polymerase Motifs in EST1: Tentative Identification of a Protein Component of an Essential Yeast Telomerase", <i>Cell</i> , 23 Feb. 1990, pp. 529-530, Vol. 60.	<input type="checkbox"/>
LDL	C38	LUSTIG, ARTHUR J., "The identification of telomerase subunits: catalysing telomere research", <i>Trends in Cell Biology</i> ; August 1997, pp. 299-302, Vol. 7.	<input type="checkbox"/>
LDL	C39	MALICKI, J. et al. "A human <i>HOX4B</i> regulatory element provides head-specific expression in <i>Drosophila</i> embryos", <i>Nature</i> , 23 July 1992, pp. 345-357, Vol. 358.	<input type="checkbox"/>
LDL	C40	NAKAYAMA, J. et al. "Cloning of a Candidate cDNA Encoding a Proteinaceous Component of Mammalian Telomerase", <i>Molecular Biology Cell Abstracts Supp.</i> 7, 1996, p. 875-884, 286a Section 1664.	<input type="checkbox"/>
LDL	C41	NATARAJAN et al. "Major histocompatibility complex determinants select T-cell receptor alpha chain variable region dominance in a peptide-specific response." <i>Proc. Natl. Acad. Sci.</i> , Oct 1992, pp. 8874-8878, Vol. 19.	<input type="checkbox"/>
LDL	C42	PASZKOWSKI, JERZY et al. "Direct gene transfer to plants," <i>The EMBO Journal</i> , 1984, pp. 2717-2722, Vol. 3, No. 12.	
LDL	C43	POTRYKUS, I. et al. "Direct gene transfer to cells of a graminaceous monocot", <i>Mol. Gen. Genet.</i> , 1985, pp. 183-188, Vol. 199.	<input type="checkbox"/>
LDL	C44	RAYMOND, E., et al.; Agents that target telomerase and telomeres; <i>Curr. Opin. Biotechnol.</i> ; 1996; 7:583-91	<input type="checkbox"/>
LDL	C45	RHYU, M.S. "Telomeres, telomerase, and immortality"; <i>J. Natl. Cancer Inst.</i> ; 21 June 1995; pp. 884-894, Vol. 87, No. 12.	<input type="checkbox"/>
LDL	C46	SCHEMA et al. "Parallel human genome analysis: Microarray-based expression monitoring of 1000 genes", <i>Proc. Natl. Acad. Sci.</i> , Oct. 1996, pp. 10614-10619, Vol. 93, USA.	<input type="checkbox"/>
LDL	C47	SCHWARTZ, H. et al. "Telomere Reduction in Giant Cell Tumor of Bone and with Aging"; <i>Cancer Genet Cytogenet</i> ; 1993; pp. 132-138, Vol. 71, Elsevier Science Publishing Co., Inc., New York, U.S.A.	<input type="checkbox"/>
LDL	C48	SINGER, M. "Unusual Reverse Transcriptases", <i>Journal of Biological Chemistry</i> ; 1995, pp. 24623-23626, Vol. 270, No. 42	<input type="checkbox"/>

Examiner Signature		Date Considered	7-22-04
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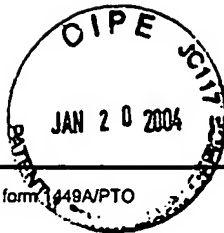
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LAL	C49	SMITH, J. & YEH, G. "Telomere Reduction in Endometrial Adenocarcinoma"; <i>Am. J. Obstet. Gynecol.</i> ; Dec. 1992; pp. 1883-1887, Vol. 167, No. 6	<input type="checkbox"/>
LAL	C50	TAIT, J. et al. "Structure and Polymorphisms of the Human Annexin III (ANX3) Gene", <i>Genomics</i> , 1993, pp. 79-86, Vol. 18, No. 1	<input type="checkbox"/>
LAL	C51	WINTER, G. & HARRIS, W. "Humanized Antibodies", <i>Trends Pharmacol. Sci.</i> , May 1993, pp. 139-143, Vol. 14.	<input type="checkbox"/>
LAL	C52	WIRTH, URS et al; "Immediate-Early RNA 2.9 and Early RNA 2.6 of Bovine Herpesvirus 1 Are 3' Coterminal and Encode of Putative Zinc Finger Transactivator Protein"; <i>Journal of Virology</i> ; May 1992; pp. 2763-2772, Vol. 66, No. 5.	<input type="checkbox"/>
LAL	C53	ZAUG, ARTHUR et al., "Method for determining RNA 3' ends and application to human telomerase RNA", <i>Nucleic Acids Research</i> , 1996, pp. 532-533, Vol. 24, No. 3.	<input type="checkbox"/>

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PTO/SB/08A (08-03)

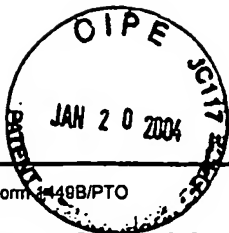
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COL	A1	US-6,440,735 B1	08-27-2002	Gaeta	
COL	A2	US-6,444,650 B1	09-03-2003	Cech et al.	
COL	A3	US-6,517,834 B1	02-11-2003	Weinrich et al.	
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COL	A6	US 2002-0164786 A1	11-07-2002	Cech et al.	
COL	A7	US 2002-0187471 A1	12-12-2002	Cech et al.	
COL	A8	US 2003-0009019 A1	01-09-2003	Cech et al.	
COL	A9	US 2003-0032075 A1	02-13-2003	Cech et al.	
COL	A10	US 2003-0044953 A1	03-06-2003	Cech et al.	
COL	A11	US 2003-0059787 A1	03-27-2003	Cech et al.	
COL	A12	US 2003-0096344 A1	05-22-2003	Cech et al.	
COL	A13	U.S. Application No. 09/492,593		Cech et al.	
COL	A14	U.S. Application No. 09/721,477		Cech et al.	
COL	A15	U.S. Application No. 09/721,506		Cech et al.	
COL	A16	U.S. Application No. 09/074,584		Cech et al.	

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PTO/SB/08B (08-03)

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LDL	C1	ADAMS, MARK et al. "Initial Assessment of Human Gene Diversity and Expression Patterns Based Upon 83 Million Nucleotides of cDNA Sequence" <i>The Genome Directory: Supplement to Nature</i> 28 September 1995, 1995, pp. 3-174, Vol. 377, Issue 6547S.	
	C2		

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